

ABSTRACT

[0048] Methods and apparatuses for testing image sensors are disclosed. Desirable apparatuses of the present invention include image sensor testing devices comprising a digital light projection system capable of projecting static or dynamic images onto an image sensing device under test and an image sensor signal detection means for analyzing the output of said image sensing device under test. The digital light projection system comprises a light source, collimating optics, a digital micromirror device, and focusing optics. Other desirable methods and apparatuses of the present invention include image sensor testing devices employing a digital light projection system capable of simultaneously testing a plurality of image sensors. According to the present invention, the light source is calibrated and converted to a desired test image by the digital micromirror device. The test image is then focused onto an image sensor, the output of which is read by a detector and correlated with the input digital test image.